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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,291	11/26/2003	James R. Rousseau	GP-303187	5563
7590	03/08/2006		EXAMINER	
CHRISTOPHER DEVRIES General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000			NGUYEN, THU V	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/723,291	ROSSEAU, JAMES R.
	Examiner	Art Unit
	Thu Nguyen	3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 November 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-10 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

The reply brief submitted on November 23, 2005 has been entered, however, in view of the request for RCE, the appeal is abandon and prosecution is reopened. All claims 1-10 are still pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al (US 5,591,906) in view of Sharp (US 5,569,848) and Jackson et al (US 6,237,234).

As per claim 1-3, Okawa teaches a system of determining tire pressure faults in a vehicle, the system comprises: determining the number of tire revolution of a first and second tire (col.4, lines 10-11); comparing the number of revolutions of the first and second tire using the ratio between the tires to determine if pressure fault has occurred (col.4, lines 10-26). Okawa does not suggest using distance value for the comparison. However, Okawa teaches using rotational angular velocity value (col.4, lines 10-11), further since Sharp teaches that it is well known to determine distance from the rotation angular speed using an odometer, and there is a close relation between the rotation angular speed and distance (col.4, lines 18-61), and Jackson teaches specific relationship between distance travel and the angular speed (col.4, lines 55-59), it

would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the distance determined from the wheel rotational speed taught by Sharp and Jackson to determine the tire pressure abnormality of Okawa in order to use the same output distance determined from the odometer to check for the pressure fault of the wheels, since utilizing the distance determined from the number of pulses output from a sensor in a fixed amount of time, or utilizing the number of pulses outputted from the speed sensor as preferred by the designer requires only routine skill in the art.

As per claim 4-6, refer to claims 1-3 above.

As per claim 7, Okawa teaches coupling the sensors to an ABS system (col.3, lines 63-67).

As per claim 8, Okawa teaches determining tire pressure fault by analyzing a ratio of wheel speed traveled by at least two wheels (col.17, lines 16-22). Concerning using distances instead of wheel speed, refer to claim 1 above.

As per claim 9-10, Okawa teaches a conventional method of detecting tire pressure by direct measurement of the pressure of the tire using pressure sensor (col.1, lines 22-28), when the method for direct measuring the pressure of the tire is used, the speed, and the time are just independent factors from determining a tire pressure.

Response to Arguments

3. Applicant's arguments in the reply brief filed on November 23, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument on page 2 second paragraph, as explained in the examiner's answer, the independent claims 1, 4, and 6 are very broadly claimed, the claims do not disclose how the distance of the present application is determined. As explained in the examiner's answer in page 8, Sharp teaches that the distance traveled of the tire with pressure fault is less than the distance traveled of the tire with proper pressure (sharp col.4, lines 7-15, and lines 19-24). Sharp further teaches determining the distance by integrating the speed signals (col.13, lines 1-10), therefore, in view of Sharp teaching in col.4, lines 7-15 and in col.13, lines 1-10, integrating the speed signal of Sharp and determining the tire pressure based on the distance would have been obvious. It is noted that independent claims 1, 4 and 6 are very broadly claimed, the claim do not teach how the distance is determined so that the time factor is excluded, how the noise data is eliminated, and how the microprocessor limitation is overcome. Furthermore, independent claims 1, 4, and 6 do not teach in what duration the distance should be calculated. It is well known that speed is, in fact, distance measured in a unit amount of time (such as in each second, in each minute or in each hour); it is also well known that the speed is determined by accumulating the pulses outputted from the speedometer in certain amount of time (every second, etc) (Sharp col.13, lines 1-10). When the distance disclosed in claims 1, 4, and 6 are calculated in a second (or in a minute, etc), Sharp encompasses the teaching of the claims 1,

4 and 6, because the distance is measured in a unit amount of time. It seems the present application also accumulated the number of pulses from the speedometer in certain amount of time to determine the distance traveled, it is not clear how the element of time be excluded. Since claims 1, 4, and 6 do not teach how the distance is determined, claims 1, 4 and 6 do not overcome obviousness in view of the cited references, especially, in view of Sharp's teaching.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 2, 2006


THU V. NGUYEN
PRIMARY EXAMINER